

POMER ETON
MC
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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1.-20. (Cancelled)

21. (Previously Presented) A method of detecting flow from a first zone and a second zone in a multizonal well in a subterranean formation comprising the steps of:

introducing a first photoactive tracer into the first zone;

introducing a second photoactive tracer into the second zone, wherein the first photoactive tracer or the second photoactive tracer comprises a tracer matrix that comprises a photoactive material and a nondegradable polymeric material; and

detecting the first and the second photoactive tracers in the return flow from the first and second zones.

22. (Original) The method of claim 21 wherein the first photoactive tracer and the second photoactive tracer have a different absorption or emitting wavelengths.

23. (Original) The method of claim 21 wherein the first photoactive tracer or the second photoactive tracer comprises fluorescein, rhodamine B, Nile Blue A, or acridine orange.

24. (Original) The method of claim 21 wherein the first photoactive tracer or the second photoactive tracer comprises a fluorescein gel concentrate.

25. (Cancelled)

26. (Previously Presented) The method of claim 21 wherein the photoactive material comprises a fluorophore, a dye, or a pigment.

27. (Previously Presented) The method of claim 21 wherein the photoactive material comprises a fluorophore, dye, or pigment that has a blue, green, yellow, orange, orange-red, or red-far red absorption or emission spectrum.

28. (Previously Presented) The method of claim 21 wherein the polymeric material protects the photoactive material from degradation downhole.